Page 1

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US-09-417-
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US-09-417-
                            US-09-417-
                                                                                                      US-69-417-
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DELetion-weight 5.00
LEngth-factor 0
Matching-weight 1.00
NUCLEIC-Res-length 4
Spread-factor 50
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Output line length •
Compress
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\andomization
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4. US-09-417-251-7
8. US-09-417-251-15
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                                                                                                                       166 catGGATGA
||||||
|111||
130 tcgGGATGA
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140
                        191 ctccagtatcttattgacaactccgacgacatccccaccaacgatcccgacgggtggcctg
                                                                                                                                                                                                                                          105 cttttcccGtcgtcctcctgcTcctcctCcTCgCCaccatagccGcaGcCgCcGgaagcaA
                                                                                                     162 cgacGATGAcgccaatttcggcgacttcgaggaggacccggaggcG
                                                                                                                                                                                                                                                                       81 AGGACGAGGA
                                                                                                                                                                                                                                                                                                                                                                                      62 TCtCCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                      43 TCaCCTCCCcgActTtgatggtTttGAGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                   a-gacgagGac-tc--c-t-cTcg-cgacctCtCCgcc---c-GaggaCgccga---c-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gttc-c---a----c-c-atgCg--tgC-cgcggtgCt---tc---c-ctc--CtccTc-
                                                                      c--gGATGAcgccaatttcggcgacttcgaggaggacccggaggcGgaggtggtggacgac
                                                                                                                                                                                                                                                                                                                                                     tc-cCtcCc--a--t----t--gagggatc-t-----c-----cc-t-Ccg
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Off
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(1-1774)
(1-1943)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ctcacCagctGCccgCGcatCcaattcctctcgcTggaCggcTgc
                                                                                                                                                                                                                                                                    ttTtGggGACtTCTCCG attttGAGGACtCgGAtgctgA
                                                                                                                                                                                                                                                                                                                                                                                   tetteteaccetetgegacgaceteaCCG
                                                                                                                                                                Ggaggtggtggacgac
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\$ analyTeaceageGTcGAcGAgGCccAgaGCATACTCACcggaGAtgacAAAGccGTcCTT	67 49 56	US-09-417- US-09-417- US-09-417-
Gara-aGGACCAAgGAtGCtATaGT-accTGGATcaa-AAGAAGaTCGGaCCtGgcaT-tA		consensus
2 GACAGCGACCAAGGATGCTATAGTAACCTGGATCAAGAAGAAGATCGGACCTGGATTTA	50	US-09-417- US-09-417-
GAĢCCAGGACCAAGGAAGCCATCGTCGACTGGATCAACAAGAAGCTCGGCCCAG	<u> </u>	US-09-417-
:TTCTTcgtcGATGGcgTcCaCAa		consensus
	w	-09-
7 GACGTCCAGGGCTTCCCCACCATCCLCTTCTTCALCGATGGCGTCCCCAGAGGCTALAACG	55 37	US-09-417- US-09-417-
cga-aACgT-gtttTgGC-AAGGT-GAtGCcACcGAGGAgAatGAatTggCyCAGaAGTAC		consensus
8 CGAAGACGTAATTTTGGCAAAGGTGGATGCCACCGAGGAGAATGAAT	37	US-09-417-
0 CGAGAACGTGGTTTTGGCGAAGGTLGATGCGACGGAGGAGTAATTGLCGCAGAAGTAC	31	US-09-417-
6 gcccaactTcGcccTtGCcaaGGTcGacGCcaccGAGGaaaccGAccTcgCcCaGAAGTAC	49	US-09-417-
agctcgcccgggattacgCtgGCGCGcGaGtAtgccGCcGcCgC-AC-gAact-aaagG		consensus
5 CCCTCGCGCCG GAGTACGCCGCCGCGACGGAACTCAA9GG	33	US-09-417-
	26	US-09-417-
}cGcATctcGCcGgCtCaACcaAc	4 3	US-09-417-
gTcgaga-cAaCCgctttGTtATGGT-GAGTTCTACGC-CCcTGGTGtGGcCACTGCCAGG		consensus
\sim	27	US-09-417-
6 GTGGAGAAGACCGGTTTGTTATGGTGGACTTLTACGCLCCCTGGTGTGGLCACTGCCAGG	20	US-09-417-
	37	US-09-417-
ccaGCCgGAGgTgGACGAGAaggAcGTcGTcgT-tTgaagGaggAACTTcacCgacttC		consensus
cagcccaaggTgGAcGaGAAGGAcGTCGTCaTtTTGAAGGAGaagAACTT	214	US-09-417-
8 GCCGGAGGTGGACGAGAAGGALGTCGTCGTGTTGAAGGAGGGLAACTTCAGCGALTTC	14	US-09-417-
TeeTegecGenGeaAACTT	31	US-09-417-
agggagactacgacgacgaccttctcttccaagatcaggaccaggaccTacaAGgcca		consensus
8 TACAAG	20:	US-09-417-
0 TACLAGGG	14	US-09-417-
2 agggagactacgacqacqacqacnaccttclcttccaagatcaggaccaggaccTcacAGGCca	25	US-09-417-
ctccagtatcttattgacaactccgacgacalccccaccaacgalcccgacgggtggcctg		consensus
	201	US-09-417-

TITCAAGACTEGA TITCCATATGACTEGA TITCCATATGACTEGA TITCCATATGACTEGA TITCCATATGACTEGA TITCCATATTGA TITCAAGAACCC CAAGCTTCCTT LILILIIIIIIIIIIIIIIIIIIIIIIIIIII	US-09-417- 1167 GtghacCaGTtgCcGAcThCTTTGGtATTACTGGachaGagaCcacaGTTCTTGCtTACAC	US-09-417- 1106 GCAAAACCATTTAAGGGAAAGLTALTATTLGTCGTLTGTGGAACGAGACAGTGAGGAAGTTG	US-09-417- 1045 GATHTRACTATTTGCLGTTGCAAGCGAGGTCCACAAATTLCTGCCCATCTTTAAGGAAGCA US-09-417- 859 GTTGATCTATTTGCGATTCAAATGATCCAGAGAAACTAATCCCCATATTTGAAGAGLCG	US-09-417- 984 T9GT9ACCACACTAACTCAAGAAACTCCAGAAACCACTAGAAACCAACC	US-09-417- 923 TATGATGGGGAGTTTAABAGCATCAGCCATTGCTGGTTTTGTTGTCTTGTC	US-09-417- 862 tGCagCAAGCGAAGCGTCCGTTAGTGCTGAAGAAGAGAGAGGAGGAGAAAGTGAACCTCC	US-09-417- 801 AAGATAGCATCAACTTTTATCAGACTTCGATGTTGCTAAGCTTTTCCATATCGAGCTCCTGATGTTGCTAAGCTTTTCCATATCGAGCTTTTCCATATCGAGCTTTTCCATATCGAGCTGTCGAGTGGCCAAGCTTTTCCACATTGAGCTGAGCTGAGCTGGCCAAGCTTTTCCACATTGAGCTGAGCTGAGCTGGCCAAGCTTTTCCACATTGAGCTGAGCTGAGCTGGCGCAAGCTTTTCCATATTGAGCAGCTGGATCCTGATGTGGCAAGCTTTTCCATATTGAGCAGCTGGGCAAGCTTTTCCATATTGAGCAGCTGGGGGAGGCTTTTCCATATTGAGCAGCTGGGGGAGGCTTTTCCATATTGAGAGCTGGGGGAGGCTTTTCCATATTGAGCAGCTGGGGGAGGCTTTTCCATATTGAGCGGGGGGGG	US-09-417- 554 GGETACCTGAACTCCTTGGTGGGCCCTGAAGACGATGAGCTTGCTGCTGCTGCTCCTTCAAGACTCGGCCCTGAAGACGAAGACTCGGCTGCAAGACTGGCTGCTGCTGCTGCTGCTGCTTCAAGACTGGCGCGCTGAAGACTGGGTGCTGCTGCTGCTGCTGCTGCTTCAAGACTTGGCTGCTGCTGCTGCTTCAAGACTTGGCTGCTGCTGCTTCAAGACTTGGCCTGCTTGCT
	gaCcacaGTTCTTGctTACAC	AACGAGACAGTGAGGAGGTTG	-crgcccatcrrraagGaagca 	TEGGCABTCCAATCAAGAAGCA 	GTGTCTGCtAACAAGCTTCCtT	aGAGGagGAgAAgtTGACCttC 	TEGCEAAGCTTTTCCAEATCGA	

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US-09-417- 1594 TCT US-09-417- 1408 TCT US-09-417- 1476 CCT CONSENSUS	US-09-417- 1533 Cc US-09-417- 1347 Ct US-09-417- 1415 Cc consensus Cc	US-09-417- 1472 CT US-09-417- 1286 CT US-09-417- 1354 CT Consensus CT	US-09-417- 1411 to US-09-417- 1225 ac US-09-417- 1293 gc consensus -G	US-09-417- 1350 C1 US-09-417- 1164 C1 US-09-417- 1232 C1 consensus C1	US-09-417- 1289 G: US-09-417- 1103 G(US-09-417- 1171 G(consensus G(US-09-417- 1228 TH US-09-417- 1042 TH US-09-417- 1110 TH Consensus TH	consensus G
CTTCTatCCAGCTGGGAAGAAAACATGCatctt	CAAGATGGATGGTACTACCAATGAGCATCCACGGGCAAAGTCTGACGGATGCCGACGATGACGATGAGGATGACCGAATGAGCATGAGGATGACGGATGACGAATGAGACATCACGATGAATGA	CTGGAACCLACTTACAACAALCTAGCCAAGCATCTACGTAGLGTTGACTCCCTTGTGGGTAGCLACTACACTAC	tgatgaaacaaagatgtacttcttgagatatatgcaccatggtgtggtcaattg 	CTGAALCTAATGATGGGGALGTGAAAATLGTLGTLGGGAAGAALCTGGALCLAATAGTTTT	acTTCGctGAAggTTTCTTGGAAGACAAGCTt 	TGGtAATGAaGAtgctAgGAAATTTtTCTTGaTggtGAgGTgtCacTtGAagcTATaAAG	SaaAgCC-GTttCaGAaTACTTTGGtATtAgTGG-aAtG-tcCaaaaGTtCTTGg-TACAC

345 -396

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US-09-417- 1928 aactcgagactagttc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-417- 1906 agAtgagTgcttACtgctTaGAGAGAggaatGAAATcagcaactAAtcAAATaaaaTcaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-417- 1626 GAAGACTTCTTAAATAGTTTTTGTAAGTTATTATCCCCATCTTTTATGCACTTTTTTGCAGCTG
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US-09-417- 1587 gcccAAAGAGC
agcAcCactGaCGtAAaggatGAatTgt
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US-09-417- 1596 AccaaCctcaaCttctgatgccaagGggAGcTCTGAtGCCAAAgagagccagagTaGTGA
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US-09-417- 1530 CAGTTTCGAG TCCGA
Scoring matrix:
                                              Alignment score = -1017.00
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aaA-aa-tcga--a-tgttggg-aag--a--a-c-c---t--caTg-g--tt--gcagcag
                                                                                                                      aa--cgagactagttc
                                                                                                                                                                                                                                                                                                                                          --A-attTtta-Acc---t-gagagAgg-aagaaat-----taa--AaaTaaa-t-taa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      c-g-aaAgagC---g-g--ga-g-----a---a-c---g-cg-aa---t-ga--t-a
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                                                                                                                                                                                                                                                                                                                                                                                                                                       CtttTcttTAggAAAAAAAAAAA
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DELetion-weight
LEngth-factor
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NUCLEIC-Res-length
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US-09-417-251-16
US-09-417-251-10
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109 P
                                                                                                                                                                                                                                                                   184
                                                                                                                                                                                                                                                                                                                                                         147 TKDAIVTWIKKKIGPGIYNITSVEDAERILTSETKVVLGYLNSLVGPESnELAAASRLEDD
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